



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/728,343 | 12/01/2000 | Gary Mark Crosbie | 200-0188 | 4125 |

28395 7590 08/03/2004
BROOKS KUSHMAN P.C./FGTL
1000 TOWN CENTER
22ND FLOOR
SOUTHFIELD, MI 48075-1238

| |
|----------|
| EXAMINER |
|----------|

SAMPLE, DAVID R

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

1755

DATE MAILED: 08/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/728,343 | CROSBIE, GARY MARK | |
| | Examiner | Art Unit | |
| | David Sample | 1755 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 13-20 is/are pending in the application.
- 4a) Of the above claim(s) 15-18 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 3, 4 and 6 is/are allowed.
- 6) ☒ Claim(s) 1, 5, 13, 14, 19 and 20 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 1755

DETAILED ACTION

Any rejections and/or objections, made in the previous Office Action, and not repeated below, are hereby withdrawn.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Election/Restrictions

The request for the withdrawal of the restriction is noted, however, the request is not timely because any traversal of the rejection should have been made in response to the restriction requirement. See MPEP 818.03(a).

Notwithstanding the lack of timeliness of the traversal of the restriction requirement, rejoinder has been considered but is not appropriate because the sealant composition in claim 15 is of a different scope than any other composition under consideration. Moreover, independent claim 18 does not refer to any glass composition.

Claim Rejections - 35 USC § 112

Claims 14, 19 and 20 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Art Unit: 1755

Claims 14, 19 and 20 recite that the composition contains 15-40, or 20-35 weight percent Mg_2SiO_4 . The only reference that the examiner was able to locate with regards to amount of forsterite is at page 15, lines 29-30 which discloses a composition containing 51.25 wt% Mg_2SiO_4 . This is inadequate support for the recitations 15-40 or 20-35 wt% Mg_2SiO_4 .

Claim Rejections - 35 USC § 103

Claims 1, 5, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morrissey (US Patent No. 3,022,179).

Morrissey et al. discloses a glass composition that the examiner believes has overlapping ranges of components with the glass of the present invention. Further in this regard, a theoretical composition containing 50 wt% SiO_2 , 30 wt% BaO , 15 wt% MgF_2 and 5 wt% MgO (within the scope of Morrissey) converts to a glass containing 56 wt% SiO_2 , 13 mol% BaO , 23 mol% MgF_2 and 8 mol% MgO (a composition within the instant claims). Overlapping ranges have sufficient to establish *prima facie* obviousness. See MPEP 2144.05.

The reference discloses the presence of additional "fluxing agents" whereas the instant claims employ "consisting essentially of" language. However, there is nothing of record to suggest that MgF_2 would materially affect the novel or basic characteristics of the present composition.

The reference fails to disclose that the composition is "for a high operating temperature sealed assembly in ceramic electrolyte electrochemical conversion devices." However, this recitation is a statement of intended use, and must imply a structure that results in a product that

is different than the prior art. See MPEP 2111.02. No difference is seen between the structure of the prior art and the present claims.

Response to Arguments

Applicant's arguments filed May 12, 2004 have been fully considered but they are not persuasive.

Rejection of claims 14, 19 and 20 under 35 U.S.C. § 112, first paragraph

Applicants assert that point 5 on Figure 1B is adequate written support the claimed amount of forsterite. It is not seen how point 5 relates to the amount of Mg_2SiO_4 in the composition. Point 5 represents the weight ratio of MgO and SiO_2 in forsterite, not the amount of forsterite in the sealant composition.

Rejection of the claims as obvious over Morrissey (US Patent No. 3,022,179)

Applicants assert that the use of "consisting essentially of" claim language precludes the addition of Al_2O_3 . This argument is deemed persuasive, however, there is nothing that suggests that MgF_2 would materially affect the basic or novel characteristics of the invention.

Allowable Subject Matter

Claims 3, 4 and 6 allowed. Claim 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Sample whose telephone number is (571)272-1376. The examiner can normally be reached on Monday to Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell can be reached on (572)272-1362. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1755

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



David Sample
Primary Examiner
Art Unit 1755